IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Detlef Teichner	**GROUP:**	2623
SERIAL NO:	09/890,315	**EXAMINER:**	Sumaiya Chowdhury
FILED:	January 9, 2002		
FOR:	LOCAL NETWORK IN A VEHICLE		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RESPONSE TO NOTICE OF NON-COMPLIANT APPEAL BRIEF

This amended appeal brief is in response to the Notice of Non-Compliant Appeal Brief dated April 23, 2009. The grounds of rejection for review section now includes the rejections as set forth in the Office Action.

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being filed electronically via EFS-web with the Commissioner for Patents on the date below.

Sarah L. Henry
Sarah L. Henry

4/27/09
Date

TABLE OF CONTENTS

I. REAL PARTY IN INTEREST

The real party of interest is Harman Becker Automotive Systems GmbH of Karlsbad, Germany.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

On December 29, 2008, the appellant appealed from the final rejection of claims 1-20 under 35 U.S.C. §103. Claims 1-20, which are set forth in the Claims Appendix attached hereto, are all the remaining claims in this application.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The invention relates to a local network in a vehicle.

Claim 1 recites a local network in a vehicle with several subscribers distributed over the vehicle, which form data sources and data sinks and which are connected with one another by a data line to transmit audio, video and control data, such that the audio, video, and control data are transmitted in a format which prescribes a clocked sequence of individual bit groups of the same length, in which certain bit positions are provided respectively for the audio, video, and control data, and the bit positions for the audio or video data respectively are collected together in several connected component bit groups, and the data assigned to these component bit groups are assigned by transmitted control signals to a certain data source or data sink, at least one data source being present for audio and video data and at least one data sink being present for the audio and video data transmitted over the data line. The various elements recited in claim 1 are discussed in the clean copy of the specification of the amendment filed on November 1, 2006:

FEATURES OF CLAIM 1	SPECIFICATION
A local network in a vehicle with several subscribers distributed over the vehicle, which form data sources and data sinks and which are connected with one another by a data line to transmit audio, video and control data, such that the audio, video, and control data are transmitted in a format which prescribes a clocked sequence of individual bit groups of the same length, in which certain bit positions are provided respectively for the audio, video, and control data, and the bit positions for the audio or video data respectively are collected together in several connected component bit groups, and the data assigned to these component bit groups are assigned by transmitted control signals to a certain data source or data sink, at least one data source being present for audio and video data and at least one data sink being present for the audio and video data transmitted over the data line, where the at least one data source comprises:	pg 15, lines 4-6 pg 23, lines 4-18

a data source for compressed audio and video digital data, where the bit positions for the audio or video data are collected together in several connected component bit groups, the data source including	pg 17, lines 9-12 pg 18, lines 7-10 pg 20, lines 1-3 pg 23, lines 4-15 FIG., element 100
a demultiplexer to separate the compressed audio and compressed video data contained in one compressed signal;	pg 18, lines 12-13 pg 20, lines 4-6 pg 23, lines 15-20 pg 24, lines 20-22 FIG., element 4
a bit stream decoder to decode the compressed audio data;	pg 18, lines 14-16 pg 25, lines 1-5 FIG., element 11
an audio buffer for intermediately storing the separated audio data;	pg 18, lines 16-18 pg 21, lines 1-5 and 7-10 pg 25, lines 5-8 FIG., element 8
a bit rate converter to recode the compressed video data;	pg 18, line 19 to pg 19, line 2 pg 22, lines 9-15 pg 23, line 24 to pg 24, line 13 FIG., element 10
a video buffer for intermediately storing the separated video data;	pg 19, lines 2-3 pg 21, lines 1-5 and 7-10 pg 24, lines 13-16 FIG., element 7
a bus interface that inserts the decoded audio data and the recoded video data into the corresponding component bit groups; and	pg 17, lines 16-18 pg 19, lines 4-6 pg 24, lines 16-18 FIG., element 2
a control unit that is connected to the audio buffer and the video buffer, and which specifies and controls the adjustable intermediate storage time of the audio and video buffers.	pg 17, line 18-20 pg 19, lines 6-14 pg 20, lines 13-18 pg 21, lines 5-6 and 10-15 pg 22, lines 15-18 and 21-22 FIG., element 6

Claim 13 recites a vehicle-hosted local network. The various elements recited in claim 13 are discussed in the clean copy of the specification of the amendment filed on November 1, 2006:

FEATURES OF CLAIM 13	SPECIFICATION
A vehicle-hosted local network comprising:	pg 18, lines 7-8
a subscriber data source that transmits audio digital data and compressed digital video data where the bit positions for the audio or video data are collected together in several connected component bit groups to respective subscriber data sinks on the network, where the subscriber data source includes a demultiplexer that separates compressed audio data and compressed video data contained in one compressed source signal and a pre-processing circuit that processes in parallel the separated audio data and the separated video data to provide the audio data and the compressed video data that is transmitted to the respective subscriber data sinks on the network.	pg 17, lines 9-12 pg 18, lines 7-13 pg 19, lines 6-9 pg 20, lines 1-6 pg 21, line 16 to pg 22, line 2 pg 22, lines 19-22 pg 23, lines 4-24 pg 24, line 22 to pg 25, line 3 FIG., elements 4, 5A-B, 6-8, 10, 11 and 100

Claim 15 recites a vehicle-hosted local network. The various elements recited in claim 15 are discussed in the clean copy of the specification of the amendment filed on November 1, 2006:

FEATURES OF CLAIM 15	SPECIFICATION
The vehicle-hosted local network of claim 13, where the pre-processing circuit comprises:	pg 18, lines 7-8
a demultiplexer that separates the compressed audio data and the compressed video data contained in the compressed source signal;	pg 18, lines 12-13 pg 20, lines 4-6 pg 23, lines 15-20 pg 24, lines 20-22 FIG., element 4
an audio data processing path that decodes the compressed audio data into an uncompressed format and generates decoded audio data in response to control instructions;	pg 18, lines 14-18 pg 21, lines 1-5 and 7-10 pg 21, line 16 to pg 22, line 8 pg 24, line 19 to pg 25, line 8 pg 25, lines 1-8 FIG., elements 5B, 8, 11, and 16
a video data processing path that recodes the compressed video data to reduce the quantity of video data, and generates recoded video data in response to control instructions; and	pg 18, line 19 to pg 19, line 2 pg 19, lines 2-3 pg 21, lines 1-5 and 7-10 pg 21, line 16 to pg 22, line 15 pg 23, line 19 to pg 24, line 18 FIG., elements 5A, 7, 10 and 15
a bus interface that combines the decoded audio data and the recoded video data into component picture groups for parallel transmission over the local network to their respective data sinks.	pg 19, lines 4-6 FIG., element 2

Claim 16 recites a vehicle-hosted local network. The various elements recited in claim 16 are discussed in the clean copy of the specification of the amendment filed on November 1, 2006:

FEATURES OF CLAIM 16	**SPECIFICATION**
The vehicle-hosted local network of claim 15, where the audio data processing path comprises:	pg 18, lines 7-8
a bit stream decoder for decoding the separated compressed audio data, and for converting the audio data into an uncompressed format; and	pg 18, lines 14-16 pg 25, lines 1-5 FIG., element 11
an audio buffer for storing the separated audio data for an intermediate time determined by at least one of the control instructions.	pg 18, lines 16-18 pg 21, lines 1-5 and 7-10 pg 25, lines 5-8 FIG., element 8

Claim 19 recites a method for pre-processing a compressed signal generated by equipment for transmitting audio and video data over a local network implemented in a vehicle. The various elements recited in claim 19 are discussed in the clean copy of the specification of the amendment filed on November 1, 2006:

FEATURES OF CLAIM 19	**SPECIFICATION**
A method for pre-processing a compressed signal generated by equipment for transmitting audio and video data over a local network implemented in a vehicle, the method comprising the steps of:	pg 16, line 22 to pg 17, line 3 pg 18, lines 7-12 pg 20, lines 1-3
a) separating compressed digital audio and compressed digital video data contained in the compressed signal by demultiplexing the compressed signal, where the bit positions for the audio and video data within the compressed signal are collected together in several connected component bit groups; and	pg 18, lines 12-13 pg 20, lines 4-6 pg 23, lines 15-20 pg 24, lines 20-22 FIG., element 4
b) parallel processing the compressed audio data and the compressed video data to generate uncompressed audio data and compressed video data that is correlated in time for subsequent transmission.	pg 18, line 14 to pg 19, line 14 pg 20, lines 6-18 pg 21, line 16 to pg 23, line 3 pg 23, line 19 to pg 25, line 23 FIG., elements 5A-B, 6-8, 10 and 11

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-3, 5-10 and 12-20 are obvious in view of U.S. Patent No. 6,025,654 to Roppel (hereinafter "Roppel"), U.S. Patent No. 6,058,288 to Reed (hereinafter "Reed"), U.S. Patent No. 5,808,660 to Sekine et al. (hereinafter "Sekine"), U.S. Patent No. 5,596,647 to Wakai et al. (hereinafter "Wakai"), U.S. Patent No. 5,121,205 to Ng et al. (hereinafter "Ng") and U.S. Patent No. 6,097,435 to Stanger et al. (hereinafter "Stanger").

Whether claim 4 is obvious in view of Roppel, Reed, Sekine, Wakai, Ng, Stanger and U.S. Published Application 2001/0014207 to Kawamura et al. (hereinafter "Kawamura").

Whether claim 11 is obvious in view of Roppel, Reed, Sekine, Wakai, Ng, Stanger and U.S. Patent 5,898,695 to Fujii et al. (hereinafter "Fuji").

VII. ARGUMENT

REJECTIONS UNDER 35 U.S.C. §103(A)

CLAIM 1

Claim 1 recites a local network in a vehicle with several subscribers distributed over the vehicle, which form data sources and data sinks and which are connected with one another by a data line to transmit audio, video and control data. At least one data source is present for audio and video data and at least one data sink being present for the audio and video data transmitted over the data line. The at least one data source comprises *"a bit stream decoder to decode the compressed audio data...."* (cl. 1).

First, the Official Action contends that the claimed bit stream decoder reads on the opto-electrical converter 14 illustrated in FIG. 2 of Roppel. It is respectfully submitted that the claimed invention as a whole is not being considered. Specifically, the Official Action does not give the proper technical definition to the claimed bit stream decoder. The specification states *"[t]he unchanged, compressed audio data, which are present in a DVD disk 3, for example in accordance with the Dolby digital compression process, are decoded by a bit stream decoder 11. The bit stream decoder 11 is preferably constructed as a Dolby digital decoder,* ***and converts the compressed audio signals into uncompressed PCM signals****, which make possible Surround Sound (5 + 1 channels). The uncompressed audio data are then conducted to an audio buffer 8."* (emphasis added, clean copy of amended specification, pg. 25, lines 1-5). Thus, it is clear from the express claim language itself, and also the specification, that the bit stream **decoder** is a device that decodes compressed audio data. An opto-coupler is a not a device for decoding compressed audio data. An opto-coupler is a device that uses a short optical transmission path to transfer a signal between elements of a circuit, typically a transmitter and a receiver, while keeping them electrically isolated - since the signal goes from an electrical signal to an optical

signal back to an electrical signal, electrical contact along the path is broken. As illustrated in FIG. 2 of Roppel, the opto-electrical converter 14 element of an opto-coupler merely converts the received optical signal at the input 11 to an electrical signal – it does not decode a bit stream of audio data in preparation for the decoded audio data being made available on a data line (see the FIGURE of the application). Again, the claim as a whole must be considered.

In addition, in the claimed data source, the bit steam decoder is a device that is used to prepare data for transmission onto the data line. That is, as recited in claim 1 the bit stream decoder decodes the compressed audio data which is then buffered by the audio buffer and provided to the bus interface, which forms component bit groups for transmission onto the data line. In contrast, the opto-electrical converter 14 disclosed in Roppel is a device configured to receive data from the data line 3. Therefore, the motis-operandi of the bit stream decoder in claim 1 is entirely different than the opto-electrical converter 14 of Roppel.

Second, the Official Action contends that "[*a*] *decoder functions to convert data from one format into another. In Roppel, the opto-electrical converter converts the data in an optical signal into an electrical signal. As such, the claim limitation 'a bit stream decoder to decode the audio data' is met.*" (pg 2, subsection 1(a)). It is respectfully submitted that this is an improper reading of Roppel. Specifically, Roppel teaches that "[*i*]*n the component* [9], *control/monitoring bus 5 is connected to a bus interface 16, which is controlled by a microprocessor. <u>Data source 1 with its **encoding circuit**</u> communicates with the control unit via the microprocessor system. Component 9 has a bypass circuit 10. Input 11, which in this case is connected to a fiber-optic waveguide, must be provided with an opto-electronic converter 14.*" (col. 3, lines 27-34, emphasis added). When "*switch 13 to the data source is flipped, ... the signals of the data source pass via electro-optic converter 15 to output 12 and data line 3.*" (col. 3, lines 43-45).

That is, the encoded data from data source 1 passes through the switch 13, is converted, not encoded, from an electrical signal to an optical signal in the electro-optic converter 15, and is output onto the data line 3 as an encoded and converted signal. If the electro-optic converter 15 were to function as a decoder, the signal would first be encoded by the data source 1 and then be directly decoded by the electro-optic converter 15, which would be a technically fruitless operation. As such, the opto-electronic <u>converter</u> 14, which has the opposite function of the electro-optic <u>converter</u> 15, consequently is also not a decoder. Thus, according to a fair and proper reading, the opto-electronic converter 14 is necessarily NOT a bit stream decoder as recited in claim 1.

Third, the Official Action acknowledges that Roppel "*fails to teach... a demultiplexer to separate the compressed audio and the compressed video data in one compressed signal....*" (pg 4). Thereafter, the Official Action contends that Reed teaches "*a demultiplexer (demodulation module) to separate the compressed audio and compressed video data in one compressed signal (col. 22, lines 7-12).*" (pg 4). Applicants respectfully submit that the Official Action is not considering the claimed invention as a whole. Specifically, Reed teaches that "[*the*] *PEAC 69 or passenger entertainment auxiliary controller receives broadcast video programs such as panoramic camera, VTRs and the PFIS 50 and <u>converts these signals into</u>* <u>[baseband frequency division multiplex]</u> *<u>format</u>... <u>The PEAC 69 provides preprocessing functions for the ESU 22 and control over the overhead video system</u>. Inputs are processed and formatted and then routed to the ESU 22 and overhead video system. The PEAC 69 includes a control module and a demodulation module. The control module controls and coordinates the modular functions of the PEAC 69. The control module interprets commands received from the VCU 44 and issues commands for the voice activated and public address keyline process logic, VTRs, and the ESU*

22 demodulators. <u>The demodulation module is used to provide separation of BFDM inputs into their audio and video components for output of only one of the four audio channels to the mux audio system and the video signal to the overhead video system</u>." (col. 21, line 57 to col. 22, line 12, emphasis added). Thus, according to a fair and proper reading of Reed, the broadcast video is received by the PEAC, converted into a multiplexed format, preprocessed and then demodulated in the ESU 22 demodulators to separate the audio and the video components. The audio and the video components are subsequently output to the audio and the video systems. That is, Reed explicitly teaches preprocessing the video signal **<u>before</u>** separating the audio and the video components from the multiplex signal. Therefore, Reed teaches away from the feature of "*a demultiplexer to separate the <u>compressed audio and compressed video data</u> contained in one compressed signal*" when read with the features of "*a bit stream decoder to decode the <u>compressed audio data</u>*" and "*a bit rate converter to recode the <u>compressed video data</u>....*" (cl. 1, emphasis added).

A fair and proper reading of the prior art references indicates that the scope and content of this prior art, and the combined prior art references, fail to disclose several features of the claimed invention at least as set forth above. Rejections of obviousness cannot be sustained by mere conclusionary statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In this case since the underpinnings relied upon in the Official Action are factually incorrect, the subject matter of claim 1 cannot be deemed obvious in view of the lengthy combination of prior art references since the apparatus recited in claim 1 is more than a predictable use of prior art elements according to their established functions.

CLAIM 13

Claim 13 recites the feature *"the subscriber data source includes a demultiplexer that separates compressed audio data and compressed video data contained in one compressed source signal"* (cl. 13). The Official Action acknowledges that Roppel *"fails to teach... a demultiplexer to separate the compressed audio and the compressed video data in one compressed signal...."* (pg 4). The Official Action then contends that Reed teaches *"a demultiplexer (demodulation module) to separate the compressed audio and compressed video data in one compressed signal (col. 22, lines 7-12)."* (pg 4). Applicants respectfully submit that the Official Action is not considering the claimed invention as a whole.

Reed teaches that "[*the*] *PEAC 69 or passenger entertainment auxiliary controller receives broadcast video programs such as panoramic camera, VTRs and the PFIS 50 and* <u>*converts these signals into* [baseband frequency division multiplex] *format*</u>*...* <u>*The PEAC 69 provides preprocessing functions for the ESU 22 and control over the overhead video system*</u>*. Inputs are processed and formatted and then routed to the ESU 22 and overhead video system. The PEAC 69 includes a control module and a demodulation module. The control module controls and coordinates the modular functions of the PEAC 69. The control module interprets commands received from the VCU 44 and issues commands for the voice activated and public address keyline process logic, VTRs, and* <u>*the ESU 22 demodulators*</u>*.* <u>*The demodulation module is used to provide separation of BFDM inputs into their audio and video components for output of only one of the four audio channels to the mux audio system and the video signal to the overhead video system*</u>." (col. 21, line 57 to col. 22, line 12, emphasis added). Thus, according to a fair and proper reading of Reed, the broadcast video is received by the PEAC, converted into a multiplexed format, preprocessed and then demodulated in the ESU 22 demodulators to separate

the audio and the video components. The audio and the video components are subsequently output to the audio and the video systems. Thus, Reed explicitly teaches preprocessing the video signal **before** separating the audio and the video components from the multiplex signal. Therefore, Reed teaches away from the feature of "*a demultiplexer* *that separates compressed audio data and compressed video data* *contained in one compressed source signal*" when read with the features of "*a pre-processing circuit that processes in parallel* *the separated audio data* *and* *the separated video data* *to provide the audio data and the compressed video data that is transmitted to the respective subscriber data sinks on the network....*" (cl. 13, emphasis added).

A fair and proper reading of the prior art references indicates that the scope and content of this prior art, and the combined prior art references, fail to disclose several features of the claimed invention at least as set forth above. Rejections of obviousness cannot be sustained by mere conclusionary statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In this case since the underpinnings relied upon in the Official Action are factually incorrect, the subject matter of claim 13 cannot be deemed obvious in view of the lengthy combination of prior art references since the apparatus recited in claim 13 is more than a predictable use of prior art elements according to their established functions.

CLAIM 15

It is respectfully submitted that this rejection is now moot since claim 13 is patentable for at least the reasons as set forth above.

CLAIM 16

The Official Action contends the combination of Roppel, Reed, Sekine, Wakai, Ng and Stanger teaches the feature of "*a bit stream decoder for decoding the separated compressed*

audio data, and for converting the audio data into an uncompressed format...." (cl. 16, emphasis added). Applicants respectfully disagree with the aforementioned characterization.

First, the Official Action contends that the claimed bit stream decoder at least partially reads on the opto-electrical converter 14 illustrated in FIG. 2 of Roppel. It is respectfully submitted that the claimed invention as a whole is not being considered. Specifically, the Official Action does not give the proper technical definition to the claimed bit stream decoder. The specification states "*[t]he unchanged, compressed audio data, which are present in a DVD disk 3, for example in accordance with the Dolby digital compression process, are decoded by a bit stream decoder 11. The bit stream decoder 11 is preferably constructed as a Dolby digital decoder,* ***and converts the compressed audio signals into uncompressed PCM signals****, which make possible Surround Sound (5 + 1 channels). The uncompressed audio data are then conducted to an audio buffer 8.*" (emphasis added, clean copy of amended specification, pg. 25, lines 1-5). Thus, it is clear from the express claim language itself, and also the specification, that the bit stream **decoder** is a device that decodes compressed audio data. An opto-coupler is a not a device for decoding compressed audio data. An opto-coupler is a device that uses a short optical transmission path to transfer a signal between elements of a circuit, typically a transmitter and a receiver, while keeping them electrically isolated - since the signal goes from an electrical signal to an optical signal back to an electrical signal, electrical contact along the path is broken. As illustrated in FIG. 2 of Roppel, the opto-electrical converter 14 element of an opto-coupler merely converts the received optical signal at the input 11 to an electrical signal – it does not decode a bit stream of audio data in preparation for the decoded audio data being made available on a data line (see the FIGURE of the application). Again, the claim as a whole must be considered.

In addition, in the claimed data source, the bit steam decoder is a device that is used to prepare data for transmission onto the data line. That is, as recited in claim 1 the bit stream decoder decodes the compressed audio data which is then buffered by the audio buffer and provided to the bus interface, which forms component bit groups for transmission onto the data line. In contrast, the opto-electrical converter 14 disclosed in Roppel is a device configured to receive data from the data line 3. Therefore, the motis-operandi of the bit stream decoder in claim 1 is entirely different than the opto-electrical converter 14 of Roppel.

Second, the Official Action contends that "[*a*] *decoder functions to convert data from one format into another. In Roppel, the opto-electrical converter converts the data in an optical signal into an electrical signal. As such, the claim limitation 'a bit stream decoder to decode ... is met.*" (pg 2, subsection 1(a)). It is respectfully submitted that this is an improper reading of Roppel. Specifically, Roppel teaches that "[*i*]*n the component* [9], *control/monitoring bus 5 is connected to a bus interface 16, which is controlled by a microprocessor. Data source 1 with its* ***encoding circuit*** *communicates with the control unit via the microprocessor system. Component 9 has a bypass circuit 10. Input 11, which in this case is connected to a fiber-optic waveguide, must be provided with an opto-electronic converter 14.*" (col. 3, lines 27-34, emphasis added). When "*switch 13 to the data source is flipped, ... the signals of the data source pass via electro-optic converter 15 to output 12 and data line 3.*" (col. 3, lines 43-45). That is, the encoded data from data source 1 passes through the switch 13, is converted, not encoded, from an electrical signal to an optical signal in the electro-optic converter 15, and is output onto the data line 3 as an encoded and converted signal. If the electro-optic converter 15 were to function as a decoder, the signal would first be encoded by the data source 1 and then be directly decoded by the electro-optic converter 15, which would be a technically fruitless operation. As such, the opto-

electronic converter 14, which has the opposite function of the electro-optic converter 15, consequently is also not a decoder. Thus, according to a fair and proper reading, the opto-electronic converter 14 is necessarily NOT a bit stream decoder as recited in claim 1.

A fair and proper reading of the prior art references indicates that the scope and content of this prior art, and the prior art references as a whole fail to disclose several features of the claimed invention at least as set forth above. Rejections of obviousness cannot be sustained by mere conclusionary statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In this case since the underpinnings relied upon in the Official Action are factually incorrect, the subject matter of claim 16 cannot be deemed obvious in view of the lengthy combination of prior art references since apparatus recited in claim 16 is more than a predictable use of prior art elements according to their established functions.

CLAIM 19

Claim 19 recites the feature *"separating compressed digital audio and compressed digital video data contained in the compressed signal by demultiplexing the compressed signal, where the bit positions for the audio and video data within the compressed signal are collected together in several connected component bit groups...."* (cl. 19). The Official Action acknowledges that Roppel "*fails to teach... a demultiplexer to separate the compressed audio and the compressed video data in one compressed signal....*" (pg 4). The Official Action then contends that Reed teaches "*a demultiplexer (demodulation module) to separate the compressed audio and compressed video data in one compressed signal (col. 22, lines 7-12).*" (pg 4). Applicants respectfully submit that the Official Action is not considering the claimed invention as a whole.

Reed teaches that "[*the*] *PEAC 69 or passenger entertainment auxiliary controller receives broadcast video programs such as panoramic camera, VTRs and the PFIS 50 and converts these signals into* [baseband frequency division multiplex] *format*... *The PEAC 69 provides preprocessing functions for the ESU 22 and control over the overhead video system. Inputs are processed and formatted and then routed to the ESU 22 and overhead video system. The PEAC 69 includes a control module and a demodulation module. The control module controls and coordinates the modular functions of the PEAC 69. The control module interprets commands received from the VCU 44 and issues commands for the voice activated and public address keyline process logic, VTRs, and the ESU 22 demodulators. The demodulation module is used to provide separation of BFDM inputs into their audio and video components for output of only one of the four audio channels to the mux audio system and the video signal to the overhead video system*." (col. 21, line 57 to col. 22, line 12, emphasis added). Thus, according to a fair and proper reading of Reed, the broadcast video is received by the PEAC, converted into a multiplexed format, preprocessed and then demodulated in the ESU 22 demodulators to separate the audio and the video components. The audio and the video components are subsequently output to the audio and the video systems. Thus, Reed explicitly teaches preprocessing the video signal **before** separating the audio and the video components from the multiplex signal. Therefore, Reed teaches away from the feature of "*separating compressed digital audio and compressed digital video data contained in the compressed signal by demultiplexing the compressed signal, where the bit positions for the audio and video data within the compressed signal are collected together in several connected component bit groups*" when read with the feature of "*parallel processing the compressed audio data and the compressed video data to*

generate uncompressed audio data and compressed video data that is correlated in time for subsequent transmission...." (cl. 19, emphasis added).

A fair and proper reading of the prior art references indicates that the scope and content of this prior art and the combined prior art references fail to disclose several features of the claimed invention at least as set forth above. Rejections of obviousness cannot be sustained by mere conclusionary statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. In this case since the underpinnings relied upon in the Official Action are factually incorrect, the subject matter of claim 19 cannot be deemed obvious in view of the lengthy combination of prior art references since apparatus recited in claim 19 is more than a predictable use of prior art elements according to their established functions.

VIII. CONCLUSION

For all the foregoing reasons, applicants submit that the rejection of claims 1-20 is erroneous and reversal thereof is respectfully requested.

If there are any additional fees due in connection with the filing of this appeal brief, please charge them to our Deposit Account No. 50-3381.

Respectfully submitted,

Patrick O'Shea

Patrick J. O'Shea
Reg. No. 35,305
O'Shea Getz P.C.
1500 Main Street, Suite 912
Springfield, MA 01115
(413) 731-3100, Ext. 102

CLAIMS APPENDIX

1. (Previously Presented) A local network in a vehicle with several subscribers distributed over the vehicle, which form data sources and data sinks and which are connected with one another by a data line to transmit audio, video and control data, such that the audio, video, and control data are transmitted in a format which prescribes a clocked sequence of individual bit groups of the same length, in which certain bit positions are provided respectively for the audio, video, and control data, and the bit positions for the audio or video data respectively are collected together in several connected component bit groups, and the data assigned to these component bit groups are assigned by transmitted control signals to a certain data source or data sink, at least one data source being present for audio and video data and at least one data sink being present for the audio and video data transmitted over the data line, where the at least one data source comprises:

a data source for compressed audio and video digital data, where the bit positions for the audio or video data are collected together in several connected component bit groups, the data source including

a demultiplexer to separate the compressed audio and compressed video data contained in one compressed signal;

a bit stream decoder to decode the compressed audio data;

an audio buffer for intermediately storing the separated audio data;

a bit rate converter to recode the compressed video data;

a video buffer for intermediately storing the separated video data;

a bus interface that inserts the decoded audio data and the recoded video data into the corresponding component bit groups; and

a control unit that is connected to the audio buffer and the video buffer, and which specifies and controls the adjustable intermediate storage time of the audio and video buffers.

2. (Previously Presented) The local network of claim 1, where

the data source for compressed audio and video data comprises a data source for other compressed data, where the demultiplexer separates the other compressed data from the compressed audio data and the compressed video data, and where the data source further comprises,

a second bit rate converter for recoding the other compressed data, and

a data buffer for intermediately storing the separated other data, and where the bus interface inserts the decoded audio data, the recoded video data, and the recoded other data into the corresponding component bit groups.

3. (Previously Presented) The local network of claim 1, where at least one of the audio and video buffers is situated before the bus interface.

4. (Previously Presented) The local network of claim 1, where at least one of the audio and video buffers is operationally interposed between the demultiplexer and the bit stream decoder and the bit rate converter associated with the audio and video buffers.

5. (Previously Presented) The local network of claim 12, further comprising analytical units associated with the bit stream decoder and the bit rate converters, where the analytical units determine a time relation of the compressed video data with respect to the compressed audio data, and where the analytical units are connected to the control unit to specify the intermediate storage times of the audio, video and other buffers.

6. (Previously Presented) The local network of claim 12, where the control unit controls the bit stream decoder and the bit rate converters to synchronize the time relation between the decoded audio data, the recoded video data and the recoded other data.

7. (Previously Presented) The local network of claim 1, where the data line comprises an optical data line.

8. (Previously Presented) The local network of claim 12, where the bit rate converter that recodes the compressed video data is connected to the control unit, and where the control unit controls the bit rate converter for the compressed video data to control an amount of data reduction during a bit rate conversion process performed by the bit rate converter in dependence on one of the resolution and the size of a display in the associated data sink for video data.

9. (Previously Presented) The local network of claim 1, where the bit stream decoder decodes the compressed audio data by converting the compressed audio signal into a PCM audio signal.

10. (Previously Presented) The local network of claim 1, where the data source comprises a DVD player.

11. (Previously Presented) The local network of claim 1, where at least one data sink for the data transmitted from the data source via the data line comprises a buffer for the intermediate storage of the received data, where an intermediate storage time of the data sink buffer is adjusted as a function of a control signal transmitted from the data source via the data line.

12. (Previously Presented) The local network of claim 2, where the data source further comprises:

a control unit, connected to the audio buffer, the video buffer, and the other data buffer, that specifies and controls the adjustable intermediate storage time of the audio, video and other buffers.

13. (Previously Presented) A vehicle-hosted local network comprising:

a subscriber data source that transmits audio digital data and compressed digital video data where the bit positions for the audio or video data are collected together in several connected component bit groups to respective subscriber data sinks on the network, where the subscriber data source includes a demultiplexer that separates compressed audio data and compressed video data contained in one compressed source signal and a pre-processing circuit that processes in parallel the separated audio data and the separated video data to provide the audio data and the compressed video data that is transmitted to the respective subscriber data sinks on the network.

14. (Previously Presented) The vehicle-hosted local network of claim 13, where the subscriber data source comprises:

a device that generates the compressed source signal.

15. (Previously Presented) The vehicle-hosted local network of claim 13, where the pre-processing circuit comprises:

a demultiplexer that separates the compressed audio data and the compressed video data contained in the compressed source signal;

an audio data processing path that decodes the compressed audio data into an uncompressed format and generates decoded audio data in response to control instructions;

a video data processing path that recodes the compressed video data to reduce the quantity of video data, and generates recoded video data in response to control instructions; and

a bus interface that combines the decoded audio data and the recoded video data into component picture groups for parallel transmission over the local network to their respective data sinks.

16. (Previously Presented) The vehicle-hosted local network of claim 15, where the audio data processing path comprises:

a bit stream decoder for decoding the separated compressed audio data, and for converting the audio data into an uncompressed format; and

an audio buffer for storing the separated audio data for an intermediate time determined by at least one of the control instructions.

17. (Previously Presented) The vehicle-hosted local network of claim 15, where the video data processing path comprises:

a bit rate converter for recoding the compressed video data to reduce the quantity of video data; and

a video buffer for storing the separated video data for a time determined by at least one of the control instructions.

18. (Previously Presented) The vehicle-hosted local network of claim 13, where the subscriber data source comprises:

a device that generates the compressed source signal including compressed audio data and compressed video data; and where the pre-processing circuit separately processes the compressed audio data and the compressed video data to generate uncompressed audio data and a reduced quantity of compressed video data.

19. (Previously Presented) A method for pre-processing a compressed signal generated by equipment for transmitting audio and video data over a local network implemented in a vehicle, the method comprising the steps of:

a) separating compressed digital audio and compressed digital video data contained in the compressed signal by demultiplexing the compressed signal, where the bit positions for the audio and video data within the compressed signal are collected together in several connected component bit groups; and

b) parallel processing the compressed audio data and the compressed video data to generate uncompressed audio data and compressed video data that is correlated in time for subsequent transmission.

20. (Previously Presented) The method of claim 19, where the step of parallel processing comprises the steps of:

decoding the compressed audio data into an uncompressed format;

recoding the compressed video data to reduce the quantity of video data; and

combining the decoded audio data and the recoded video data into component picture groups for parallel transmission over the local network to their respective data sinks.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.